abcam

Product datasheet

Anti-MDMX/MDM4 antibody ab16058

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Overview

Product name Anti-MDMX/MDM4 antibody

Description Rabbit polyclonal to MDMX/MDM4

Host species Rabbit

SpecificityTwo bands were detected with the antibody in HeLa nuclear extract, at ~80 and 100 kDa. The 80

kDa band was no longer detected after the addition of competing peptide, suggesting that this band corresponds to MDMX/MDM4. MDMX/MDM4 has been shown previously to migrate aberrantly at an ~80 kDa size (see deGraaf, et.al., J Biol Chem. 2003 Oct 3;278(40):38315-24). The 100 kDa band is not competed away by the addition of the immunizing peptide, suggesting

that it is nonspecific cross-reactivity.

Tested applications

Suitable for: ICC/IF, WB

Species reactivity

Reacts with: Cow, Human

Immunogen Synthetic peptide corresponding to Human MDMX/MDM4 aa 200-300 (internal sequence)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab16383)

Positive control Recombinant Human MDMX/MDM4 protein (ab114467) can be used as a positive control in WB.

This antibody gave a positive signal in the following nuclear cell extract: HeLa. This antibody gave

a positive signal in the following Methanol fixed cell lines: HeLa. ICC/IF: HeLa cells

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

1

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

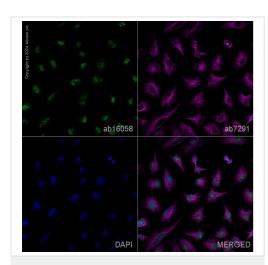
The Abpromise guarantee Our Abpromise guarantee covers the use of ab16058 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★ ☆☆ <u>(1)</u>	Use a concentration of 5 µg/ml.
WB		1/1000. Detects a band of approximately 80 kDa (predicted molecular weight: 58 kDa).

Target		
Function	Inhibits p53/TP53- and TP73/p73-mediated cell cycle arrest and apoptosis by binding its transcriptional activation domain. Inhibits degradation of MDM2. Can reverse MDM2-targeted degradation of TP53 while maintaining suppression of TP53 transactivation and apoptotic functions.	
Tissue specificity	Expressed in all tissues tested with high levels in thymus.	
Sequence similarities	Belongs to the MDM2/MDM4 family. Contains 1 RanBP2-type zinc finger. Contains 1 RING-type zinc finger. Contains 1 SWIB domain.	
Domain	Region I is sufficient for binding TP53 and inhibiting its G1 arrest and apoptosis functions. It also binds TP73. Region II contains most of a central acidic region and a putative C4-type zinc finger. The RING finger domain which coordinates two molecules of zinc mediates the heterooligomerization with MDM2.	
Post-translational modifications	Ubiquitinated. Deubiquitinated by USP2; leading to stabilize it.	
Cellular localization	Nucleus.	

Images



Immunocytochemistry/ Immunofluorescence - Anti-MDMX/MDM4 antibody (ab16058)



Western blot - Anti-MDMX/MDM4 antibody (ab16058)

ab16058 staining MDMX/MDM4 in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab16058 at 5µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), preadsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

All lanes : Anti-MDMX/MDM4 antibody (ab16058) at 1/1000 dilution

Lane 1: 20ug calf thymus histone

Lane 2: 20ug HeLa nuclear extract

Lane 3: 20ug calf thymus histone with Human MDMX/MDM4

peptide (ab16383) at 1 µg/ml

Lane 4: 20ug HeLa nuclear extract with Human MDMX/MDM4

peptide (ab16383) at 1 µg/ml

Secondary

All lanes : Alexa Fluor Goat polyclonal to Rabbit lgG (700) at 1/5000 dilution

Performed under reducing conditions.

Predicted band size: 58 kDa Observed band size: 80 kDa

Additional bands at: 100 kDa (possible cross reactivity)

Two bands were detected with the antibody in HeLa nuclear extract, at ~80 and 100 kDa. The 80 kDa band was no longer detected after the addition of competing peptide, suggesting that this band corresponds to MDMX/MDM4. The 100 kDa band is not competed

away by the addition of the immunizing peptide, suggesting that it is nonspecific cross-reactivity.

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